

FINDING OF NO SIGNIFICANT IMPACT
Comstock Oil and Gas, Inc.
Application to Directionally Drill and Produce the Black Stone B1 and D1 Wells
from Surface Locations outside the Big Sandy Creek Unit
to Bottomhole Locations inside the Unit
Big Thicket National Preserve, Polk County, Texas

INTRODUCTION

In accordance with 36 CFR §9.32(e), Comstock Oil and Gas, Inc. (Comstock) submitted an application to the National Park Service (NPS) on August 4, 2004, to directionally drill and produce the Black Stone B1 and D1 Wells from surface locations outside of the Big Sandy Creek Unit (Unit) of Big Thicket National Preserve (Preserve) to bottomhole targets beneath the Unit. On August 26, 2004, the Superintendent determined that the application was substantially complete and proceeded with its formal review and processing. As part of its analysis, the Preserve prepared an environmental assessment (EA).

Although it is debatable whether or not the National Environmental Policy Act (NEPA) is triggered when issuing exemptions from the NPS' nonfederal oil and gas rights regulations pursuant to 36 CFR §9.32(e), the Park Service has elected to comply with this statute in making the §9.32(e) determination by disclosing potential environmental impacts to the public.

Section 9.32(e) governs operators that propose to develop their nonfederal oil and gas rights in any unit of the National Park System by directionally drilling a well from a surface location outside unit boundaries to a location under federally owned or controlled lands within park boundaries. Under §9.32(e), an operator may obtain an exemption from the 9B regulations if the Regional Director is able to determine from available data that a proposed drilling operation under the park poses "*no significant threat of damage to park resources, both surface and subsurface, resulting from aquifer [sic] contamination or natural gas escape or the like.*" The EA contains the analysis and documentation required under §9.32(e), and also discloses to the public the potential impacts that could occur both inside and outside the Preserve. The NPS has determined that the Comstock Oil and Gas Inc. application qualifies for a regulatory exemption under 36 CFR §9.32(e).

The Preserve was established by Congress on October 11, 1974 (Public Law 93-439, 16 U.S.C. §§ 698-698e), as the nation's first Preserve, "to assure the preservation, conservation, and protection of the natural, scenic, and recreational values of a significant portion of the Big Thicket area in the State of Texas and to provide for the enhancement and public enjoyment thereof." The Preserve, located in southeast Texas, is comprised of 15 separate units, totaling 96,804 acres."

At the time of the Preserve's establishment, the U.S. Government acquired surface ownership of the area. Private entities retained the subsurface mineral interests on most of these lands, while the State of Texas retained the subsurface mineral interests underlying the Neches River and navigable reaches of Pine Island Bayou. Thus, the federal government does not own any of the subsurface oil and gas rights in the Preserve, yet the NPS is required by its laws, policies and regulations to protect the Preserve from any actions, including oil and gas operations, that may adversely impact or impair Preserve resources and values.

PREFERRED ALTERNATIVE

It is the decision of the National Park Service to implement Alternative B, (Proposed Action) as described by Comstock Oil and Gas, Inc., in its Application. Under Alternative B, NPS would issue a §9.32(e) regulatory exemption for Comstock to directionally drill and produce the Black Stone B1

and D1 wells from surface locations outside the Big Sandy Creek Unit of Big Thicket National Preserve to bottom-hole targets beneath the Unit.

Location of the Wells: The Black Stone B1 well would be sited approximately 300 feet east of the Unit boundary. The wellpad would extend to within 100 feet of the Unit boundary. The site is located on an abandoned oil and gas wellpad surrounded by managed timber. The Black Stone D1 well would be sited approximately 715 feet west of the Unit boundary. The wellpad would extend to within 515 feet of the Unit boundary. The site is a hunting camp bordered on the eastern and northern sides by managed timberlands.

The surface location of the proposed Black Stone B1 well would be:

X = 3,779,505

Y = 407,158

The bottomhole location would be:

X = 3,775,865

Y = 403,773

The surface location of the proposed Black Stone D1 well would be:

X = 3,770,675

Y = 407,134

The bottomhole location would be:

X = 3,773,070

Y = 403,540

Coordinates are in U.S. State Plane Coordinate System, NAD 27, Texas, Central Zone.

Access: Access to the Black Stone B1 well would be provided through the use of a 100-foot section of an existing logging road that extends north from FM 1276 and crosses the southern edge of the Black Stone B1 wellpad. Little or no modification to the logging road would be needed to accommodate Comstock's proposed drilling and production operations.

Access to the Black Stone D1 well would be through the use of an existing two-track road that may have been used as part of a logging operation, but in its current form may be used primarily as access to private property in the area. Multiple culverts would provide storm water drainage beneath the access road that leads from FM 1276 to the Black Stone D1 drilling and production pad, a distance of 4,224 feet or 0.8 miles. Access road improvements may be required to accommodate oilfield trucks and drilling equipment for the Black Stone D1 well.

Surface Locations and Well Pads: The Black Stone B1 surface location is on the eastern side of FM 1276 just south of the large pipeline right - of - way bisecting the Unit. The Black Stone D1 surface location is approximately one mile south of the Woodlands Trail parking area near the western boundary of the Unit. The Black Stone B1 wellpad measures 400 feet x 400 feet (160,000 sq. ft. or 3.67 acres), and the Black Stone D1 wellpad is irregularly shaped and measures (400 feet x 400 feet) – ((200 feet x 90 feet) / 2) or 3.47 acres. Each wellpad would be mechanically cleared by heavy machinery (bulldozer and maintainer). A rock pad would be developed over 2.4 acres of the wellpads to provide workspace necessary to drill the wells.

Production Facilities: If Comstock is successful in finding commercial quantities of oil and gas, two production facilities would be constructed on the drilling pads each consisting of a wellhead, production equipment, tank battery (total of three tanks), sales meter, and flow - line production infrastructure. On site oil and water (storage) flow - lines would be buried at a depth of 1 foot below ground surface on the production pad. The facility would be maintained in accordance with Comstock's Spill Prevention Control and Countermeasure Plan and 40 CFR 112.7.

Gathering Lines: Should the Black Stone B1 well be successfully completed as a producing oil and / or gas well, a 4 to 6 inch diameter sales / gathering line would be constructed to extend 800 feet north of the well to an existing pipeline. The gathering line, of wrapped and welded steel, would be buried to a minimum depth of 3 feet below the surface. Up to .55 acres (800 feet x 30 feet) could be disturbed to install the gathering line.

Should the Black Stone D1 well be successfully completed as a producing oil and / or gas well, a 4 to 6 inch diameter sales / gathering line would be constructed to extend 8,200 feet north of the well to an existing pipeline. The gathering line, of wrapped and welded steel, would be buried to a minimum depth of 3 feet below the surface. Up to 5.64 acres (8,200 feet x 30 feet) could be disturbed to install the gathering line.

Drainage: At the Black Stone B1 site sheet flow drainage is initially away from the Unit toward the northwest. Water - transported sediments from the site would travel downhill to a drainage that joins an unnamed creek that leads to Big Sandy Creek. A roadside drainage associated with FM 1276 and the road itself would serve as a buffer between the proposed site and the Unit boundary.

Sheet flow drainage from the Black Stone D1 site is initially away from the Unit toward the east. If water - transported sediments are not captured by erosion control screening and hay bales erected around the location, displaced sediments from the site would travel downhill to a drainage feature that leads to Big Sandy Creek which is located approximately 900 feet east of the wellpad. No manmade barriers or structures exist that would impede sheet flow from reaching area drainages that lead to Big Sandy Creek.

There is a low potential for migration of contaminants into the Unit from both proposed sites and if it were to occur, there would be ample time and space to respond to even a major release before there would be impacts to the Unit.

Reclamation Plan: Once drilling operations are completed, the portion of the wellpad that is no longer needed would be reclaimed, and the washout / emergency and water pits would be filled with native soil in accordance with RRC Statewide Rule 8. Upon final abandonment of the well site, the equipment and all related materials would be removed, the well plugged in accordance to RRC Statewide Rule 14, and the area returned to its original contour. The site would be reclaimed in conformance with the surface use agreement between Molpus Timberlands Management and Comstock in the case of the Black Stone B1 well, and Dennis Prejean and Comstock in the case of the Black Stone D1 well. The disposal of excess drill fluids and water would occur off - site or downhole depending on permits and approvals obtained by the operator.

Mitigation Measures: In order to reduce indirect impacts to Unit resources and values, Comstock has incorporated mitigation measures as part of their application for the proposed operations. A table listing the mitigation measures identified in the Environmental Assessment is attached to this FONSI.

ALTERNATIVES CONSIDERED

In addition to the Preferred Alternative (Alternative B / Proposed Action), the EA considered the No Action Alternative (Alternative A). Alternative A, No Action is required under the National Environmental Policy Act (NEPA) and establishes a baseline to compare the environmental consequences of the proposed action.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

Alternative A, No Action is the environmentally preferred alternative. The environmentally preferred alternative is the alternative that best meets the national environmental policy expressed in Section 101 of the National Environmental Policy Act:

- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- achieve a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities; and
- enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Under Alternative A, No Action, the well would not be drilled, and would provide the greatest protection of the area outside of the Preserve and park resources and values inside the Big Sandy Creek Unit of the Preserve. However, this alternative did not meet the criteria of recognizing the private owners' right to access their mineral interests underlying the park. Consequently, the environmentally preferred alternative was not selected as the NPS preferred alternative.

Comstock's proposal, Alternative B, was selected for implementation over the environmentally preferred alternative. The NPS preferred alternative is Alternative B, Proposed Action because Comstock holds valid oil and gas lease rights which, if developed, would not result in an impairment of park resources and values. This alternative would fulfill its park protection mandates while recognizing Comstock's right to exercise its mineral interests. After consideration of public and agency comments throughout the scoping and planning process, careful review of potential resource and visitor impacts, and development of appropriate mitigation measures to protect resources, the NPS determined that the preferred alternative best strikes a balance between resource protection and recognizing private minerals underlying this unit of Big Thicket National Preserve.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR § 1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse

Resources and concerns analyzed were dismissed from further analysis in the EA because either the resource is not found in the analysis area; there would be no effect from the proposal; or through the application of mitigation measures, there would be minor or less effects from the proposal, and there is little controversy on the on the subject or reasons to otherwise include the topic.

Resources and concerns dismissed include: Socioeconomics in and outside of the Unit; Environmental Justice; Prime and Unique Farmlands in the Unit; Air Quality in the Unit; Lightscape Management in and outside of the Unit; Geology and Soils in the Unit; Water Resources, Floodplains, and Wetlands in and outside of the Unit; Vegetation in the Unit; Fish and Wildlife in and outside of the Unit; Threatened and Endangered Species and Other Species of Management Concern in the Unit; Cultural Resources in the Unit; and Visitor Use and Experience in the Unit.

Through the scoping process, the interdisciplinary team decided to carry the following topics through the EA for analysis: Natural Soundscapes in the Unit; and Adjacent Landowners, Resources and Uses (including air quality, natural soundscape, geology and soils, vegetation, Federally - listed threatened and endangered species, and cultural resources) outside of the Unit.

Increased noise levels during construction, drilling and subsequent production activities would have short - to long - term, negligible to moderate, adverse impacts on the natural soundscape within the Unit. There could be short - to long - term, adverse impacts on air quality, natural soundscape, geology and soils, and vegetation localized around the project areas outside the Unit; but there would be no effect on Federally - listed threatened and endangered species, or cultural resources. The B1 and D1 wells would allow Comstock to access its mineral interests, and if completed as producing wells, could result in a negligible, beneficial impact on the local and regional economy.

Degree of effect on public health or safety

There would be no direct impacts on visitor use or safety within the Unit since the wellbores would cross into the Unit at a depth of approximately 4,825 feet true vertical depth (TVD) (Black Stone B1), and approximately 5,675 feet TVD (Black Stone D1). Impacts from the connected actions associated with the proposed oil and gas operations would be localized, short - to long - term, negligible to minor, and adverse.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

Refer also to historic or cultural resources criterion. As described in the EA, no wild and scenic rivers, or ecologically critical areas would be affected, because they are not in the analysis area. There is the possibility for localized, negligible to minor, adverse impacts on wetlands at the Black Stone D1 site due to transport of contaminants by low gradient sheet flow drainage from the site to floodplain areas that exist both inside and outside the Unit boundary. However, the mitigation measures proposed by Comstock are expected to confine the impacts to the site, outside the Unit boundary. The development of the Black Stone B1 and D1 wells would result in the short - to long - term loss of soil productivity and conversion of up to 6.74 acres of prime farmland soils on lands outside of the Preserve. There are no prime farmland soils inside the Unit. Potential adverse impacts on Unit resources, including air quality, lightscape management, geology and soils, water resources, floodplains, wetlands, vegetation, and fish and wildlife, from the connected actions over the short - to long - term are expected to be localized, and range from negligible to minor, adverse impacts. Elevated noise during construction, drilling and subsequent production activities would result in short - to long - term, negligible to moderate, adverse impacts on the natural soundscape in the Unit up to 1500 feet from the wellsites.

Degree to which effects on the quality of the human environment are likely to be highly controversial

The Sierra Club has expressed concerns about the project, therefore there is a potential for some controversy. However, the NPS has performed a thorough analysis and has determined that implementation of the selected alternative would not cause any significant impacts on the human environment.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks

There were no highly uncertain, unique, or unknown risks identified with this proposed oil and gas operation.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

If the Comstock wells are successful, they may prompt additional oil and gas development drilling in the vicinity. However, each proposal would be evaluated, and mitigation would be applied to reduce impacts so that significant effects would be avoided.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

Oil and gas exploration and development would continue within and adjacent to Big Thicket National Preserve regardless of whether the NPS issues an exemption under 36 CFR §9.32 (e) for this proposal. Impacts from existing oil and gas activities, recreation activities, and commercial timber would continue, resulting in localized, short - to long - term, adverse impacts on resources adjacent to the Preserve. Adherence to federal, state, and local laws and regulations, and voluntary mitigation measures by oil and gas operators would reduce potential cumulative impacts below the significant threshold level.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The NPS has no §106 responsibility with respect to the National Historic Preservation Act of 1966, as amended, for wells that originate on non - federal lands located outside the Unit, for which the wellbores would cross through the Unit to extract non - federally owned hydrocarbons from beneath the Unit. The Advisory Council on Historic Preservation concurred with this finding on September 13, 2004.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

NPS determines the directional drilling and production of the Black Stone B1 and D1 wells would have no effect on State or Federally - listed threatened and endangered species, species of management concern, or their habitat within the Unit. However, there could be impacts from cumulative actions that result in short - and long - term adverse impacts to Federally - listed threatened and endangered species outside the Unit.

In addition to Comstock's general habitat review, location site reconnaissance investigations were performed in April and May of 2004 at the Black Stone B1 site, and in May of 2004 at the Black Stone D1 site by Blanton and Associates to determine if any listed species were observed at the proposed sites. There were no indications of any State or Federally - listed threatened or endangered species found on or in the vicinity of the proposed access roads, project sites, or along gathering line corridors. Since the wells would be directionally drilled from outside the Unit, Comstock would avoid any surface disturbance of habitat in the Preserve.

Whether the action threatens a violation of Federal, state, or local environmental protection law

The proposed action has been developed to comply with all regulatory requirements. Further, this proposal is consistent with the 1980 Big Thicket National Preserve General Management Plan.

IMPAIRMENT

In addition to reviewing the list of significance criteria, the NPS has determined that implementation of the preferred alternative will not constitute an impairment to the integrity of Big Thicket National Preserve resources or values as described by NPS Management Policies (NPS 2001,

§ 1.4). This conclusion is based on a thorough analysis of the environmental impacts described in the Comstock Oil and Gas Inc. applications, relevant scientific studies, and the professional judgment of the decision - maker guided by the Big Thicket National Preserve General Management Plan (1980) and 36 CFR 9B regulations. The proposed action will result in compliance with the Preserve's enabling legislation, the protection of Preserve resources and values, and will not result in impairment of Preserve resources and values.

PUBLIC INVOLVEMENT

Public and internal scoping was conducted for this EA as required by National Park Service policy (Director's Order-12) and NEPA. Scoping included identifying major issues to address in the EA, obtaining additional information on the development of reasonable alternatives, and identifying measures for mitigating environmental impacts.

The EA was made available for public review and comment during a 30 - day period from September 29, to October 28, 2004. The EA was sent to those on the park's mailing list and included the representatives of the Alabama - Coushatta Tribe of Texas, the Texas Historical Commission, the Texas Committee on Natural Resources, the Texas Railroad Commission, and the U. S. Fish and Wildlife Service. Additional copies of the EA were sent to the Sierra Club (Houston Regional Group), the surface owners outside the Preserve, Comstock, and the Big Thicket Association.

The Lone Star Chapter of the Sierra Club responded to the public scoping newsletter as well as the EA. Substantive comments on the EA and NPS' responses are attached to this FONSI.

CONCLUSION

The preferred alternative does not constitute an action that normally requires preparation of an Environmental Impact Statement (EIS). The preferred alternative will not have a significant effect on the human environment. Environmental impacts that could occur are localized, short - to long - term, negligible to moderate adverse effects. There are no unmitigated adverse impacts to public health, public safety, threatened or endangered species, historical sites or districts listed, or eligible for listing in the National Register of Historic Places, known ethnographic resources, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, major cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that the project does not constitute a major federal action significantly affecting the quality of the human environment, and that an EIS is not required for this project and thus will not be prepared.

Approved:

Director, Intermountain Region

Date

Mitigation Measures under Proposed Action (Alternative B)

No.	Mitigation Measures - Proposed Action (Alternative B)	Resource(s) Protected	Reference in §9.32(e) Application
Project Planning and Site Construction			
1	Conduct an archeological survey of the proposed project areas	archeological resources	Section 6
2	Prepare and comply with a Spill Prevention Control and Countermeasure (SPCC) Plan	all resources, and human health and safety	Section 6
3	Black Stone B1 well, access road, pipeline and production facilities outside of the Big Sandy Creek Unit, (well will be sited approximately 300 feet east of the Unit boundary; the well / production pad will extend to within 100 feet of the Unit boundary) Black Stone D1 well, access road, pipeline and production facilities outside of the Big Sandy Creek Unit (well will be sited approximately 715 feet west of the Unit boundary; the well / production pad will extend to within 515 feet of the Unit boundary)	all resources and values in Big Thicket National Preserve	Section 4, p.1; Section 6, p. 1; and Section 7, p. 1
4	Black Stone B1 - site of a former oil drilling pad that is clear of trees and requires minor cutting of surrounding timber and use of an existing logging road as access, site chosen to reduce the potential for surface damages on federal lands while achieving exploration objectives Black Stone D1 - site chosen to reduce the potential for surface damages on federal lands while achieving exploration objectives, use of existing access road	soils, water resources, floodplains, wetlands, vegetation	Section 7, pp. 1 & 2
5	Black Stone B1 / D1 - Schedule construction to avoid rain events	soils, vegetation	Section 7, p. 1
6	Black Stone B1 / D1 - Construct ditch and 1 foot high ring levee around the wellpad	water resources, vegetation, soils	Section 4, page 6
7	Black Stone B1 / D1 - Construct 40 foot x 100 foot washout / emergency pit and line with 12 - mil plastic	water resources, soils, vegetation	Section 4, page 1
Well Drilling			
8	Black Stone B1 / D1 - Directionally drill well so that wellbore intercepts useable quality groundwater outside of the Preserve	groundwater in Preserve	Section 4, drilling diagram
9	Black Stone B1 / D1 - Use a closed - loop	water resources, soils,	Section 4, p.2

No.	Mitigation Measures - Proposed Action (Alternative B)	Resource(s) Protected	Reference in §9.32(e) Application
	containerized mud system	vegetation	
10	Black Stone B1 / D1 - Set surface casing according to State of Texas RRC requirements	groundwater	Section 4, p.3
11	Black Stone B1 / D1 - Dispose of drilling mud and well cuttings off - site	all natural resources located on and adjacent to wellpad	Section 4, p.2
Production			
12	Black Stone B1 / D1 - Reduce size of wellpad to accommodate production facility and fill in washout / emergency and water pits	Soils, vegetation, water resources	Section 4, p. 2
13	Black Stone B1 / D1 - Construct a 2 foot earthen, rock covered firewall around the tank battery with a capacity 1.5 times the largest tank	water resources, soils, vegetation	Section 4, p. 2
14	Black Stone B1 / D1 - Install a safety drip device on the off - load connection	soils	Section 4, p. 2
15	Black Stone B1 / D1 - Use mulching, seeding, silt fences, and hay bales	water resources, soils	Section 7, p.1
16	Black Stone B1 / D1 – Wind - erosion preventive measures will include watering if dust conditions are determined to be detrimental during construction	air quality, vegetation, water resources	Section 7, p. 1
17	Black Stone B1 / D1 - Notify regulatory authorities and Big Thicket Superintendent within 24 hours in the event of a release or spill of hydrocarbon condensate, crude oil, or other contaminating substance	all natural resources	Section 4, p. 3
Well Plugging			
18	Follow RRC Statewide rules 13 and 14 for well plugging	all natural resources	Section 4, p. 2

Errata Sheets
Comstock Oil and Gas, Inc.
Environmental Assessment
Application to Directionally Drill and Produce the Black Stone B1 and D1 Wells
from Surface Locations outside the Big Sandy Creek Unit
to Bottomhole Locations inside the Unit
Big Thicket National Preserve, Polk County, Texas

Substantive comments to the environmental assessment are addressed below. The comments resulted in the following three minor changes to the text of the environmental assessment.

Text Changes

Page 20, *Vegetation in the Unit*, add text to read: "... and the potential for migration into the Unit. According to Comstock's proposal, there would be two known hazardous substances, as defined by the EPA, found on the wellsite. Ethylene glycol (antifreeze in engine coolant) and gasoline on the wellsite are subject to regulation by the TCEQ and EPA. Other potential polluting substances present would be oil, grease, pipe dope, and related substances; as well as oil - based drilling mud, hydrocarbon condensate, or crude oil. All of these substances are covered by Comstock's Spill Prevention Control and Countermeasure Plan."

Page 22, *Fish and Wildlife in and outside the Unit*, under the heading *Impacts outside the Unit*, add text to read: "... competition in adjacent areas over the short term. There are both potential beneficial and adverse effects to the wildlife of the area from artificial lighting on the proposed sites, in that lighting attracts insect species, which attract nocturnal insect predators." The last sentence under the same heading on page 23, should be changed to read: "Impacts to wildlife outside the Unit would be localized, short- to long-term, beneficial, and adverse."

Page 25, *Visitor Use and Experience in the Unit*, under the heading *Impacts from Connected Actions*, should be changed to read: "It is unlikely that many visitors would be in the vicinity of the drilling and production activities; however there is the possibility for localized, short - to long - term, negligible to minor, adverse impacts on visitor use and experience."

Substantive Comments (all from Sierra Club, Houston Regional Group)	Response
Comment	

1) The Sierra Club is concerned that NPS has not provided the public with a scoping comment period of 30 days. (#1) The Sierra Club is concerned that NPS provided only 14 days for the public scoping comment period. This is unacceptable. At a minimum of 30 days for the public scoping comment period must be required. The Sierra Club requests that this EA be shelved and that NPS provide a full 30 day scoping period.

2) On pages 4-10, (#2) the NPS must give a full explanation about the re-interpretation of the 9B regulations. The Sierra Club disputes the assertion that the NPS is interpreting its 36 CFR 9B regulations appropriately. The record is replete with NPS crawl-fishing on these regulations and re-interpreting them without public input as required in the Federal Register. The NPS relies on a "draft" solicitor's opinion that has not been made final. "Draft" means that the opinion is not final. The Sierra Club requested a copy of this opinion via the Freedom of information Act (FOIA) but NPS refused to provide a copy claiming attorney-client privilege. An appeal has been pending since September 8, 2003 for information about NPS activities connected with this re-interpretation of the 9B regulations.

The NPS has in its files interviews with some of the persons who originally developed the 9B regulations. Their statements contradict NPS's re-interpretation of the 9B regulations. From 1979 to 2002 the 9B regulations were implemented differently than NPS implements them now. The jurisdiction that NPS does have on activities outside the BTNP is in protecting park resources. If park resources are threatened, adequate protection cannot be achieved, and the values and resources will suffer impairment then NPS can condemn those minerals rights so they will never cause the degradation of park resources.

Response #1: The scoping period in this case was from August 5, 2004 to August 19, 2004, a period of 15 days. The BITH superintendent has the prerogative to set the length of public scoping. The NPS believes that this period is sufficient for operations of this type that involve directional drilling into the Preserve.

Response #2: In May of 2003, NPS park staff, resource program leaders, and staff from the DOI Solicitor's office met to clarify the scope of the NPS regulatory provision addressing the directional drilling of nonfederal oil and gas within NPS units (36 CFR §9.32(e)). On November 14, 2003, the NPS Associate Director, Natural Resource Stewardship and Science signed a memorandum entitled: Final Guidance on Implementing the Directional Drilling Provision of the Service's Nonfederal Oil and Gas Regulations at 36 CFR 9B. The November 2003 memo is a Guidance document to park staff to assist them in implementing the directional drilling provision. No new regulatory language has been written, created or otherwise issued thereby. The NPS's final guidance on §9.32(e) clarifies the scope of §9.32(e), the regulatory options available, issues dealing with the implementation of §9.32(e), and NPS's compliance responsibilities under key statutes, including NEPA, and Executive Orders. The NPS has provided the Lone Star Chapter of the Houston Sierra Club a copy of the November 14, 2003 final guidance, a copy of Interim guidance on this issue, dated May 21, 2003, and other documents related to the NPS's efforts to clarify the scope and applicability of §9.32(e). These documents were provided in response to multiple, recent requests from the Lone Star Chapter pursuant to the Freedom of Information Act. The information contained in the November 14, 2003 final guidance memo constitutes the NPS's response to the substantive issues raised

Comment

3) On pages 8-9, 1.2.6 National Environmental Policy Act of 1969 (NEPA), NPS has stated in other environmental assessments EA's that it is not granting an "approval" and therefore it does not have to conduct an EA but does so anyway. This is an untrue statement. The granting of a waiver to allowing drilling through the BTNP is an approval because it ensures that Comstock does not have to develop plan of operations. (#3) The drilling by Comstock does trigger the significance test in NEPA so this is a "major federal action significantly affecting the quality of the human environment." Therefore an environmental impact statement (EIS) should be prepared.

If NPS argues that the drilling is not significant then the Sierra Club's response is that the drilling of multiple wells next to the BTNP and through the BTNP via slant drilling in addition to the proposals to drill wells within the BTNP in the Turkey Creek and Big Sandy Units does constitute the crossing of the significance threshold and requires that a programmatic EIS be prepared for the entire BTNP. (#3) There is no oil/gas management plan which assesses the total direct, indirect, connected, secondary, and cumulative impacts of multiple wells drilled inside and just outside the BTNP. The Sierra Club requests NPS prepare such an EIS.

4) On Pages 37-41, (#4) NPS has refused to conduct an alternative analysis on "all reasonable alternatives" as required by the President's Council on Environmental Quality's (CEQ) National Environmental Policy Act (NEPA) rules. In Section 1502.14(a) of these rules CEQ states, "Rigorously explore and objectively evaluate all reasonable alternatives". Such an "all reasonable alternatives" analysis would include an alternative for buying the mineral rights for the Comstock well.

Response

by the Lone Star Chapter of the Sierra Club.

Response #3: NPS directional drilling guidance issued on November 14, 2003, by the NPS Associate Director, Natural Resource Stewardship and Science entitled "Final Guidance on Implementing the Directional Drilling Provision of the Service's Nonfederal Oil and Gas Regulations at 36 CFR 9B" directs NPS staff to prepare NEPA documents on all directional drilling proposals submitted to the NPS even though it may be argued that NEPA is not triggered by such actions.

Through its NEPA analysis, NPS determined that there will be no major effects from the proposal. Major effects would be considered significant effects and trigger the need for an EIS; these effects did not reach that threshold. Threshold definitions were included in the EA.

Big Thicket National Preserve has prepared a programmatic oil and gas management plan / EIS that will be released for public review and comment during the fall of 2004. Cumulative impacts of past, present and reasonably foreseeable future drilling activity are addressed in the plan / DEIS.

Response #4: A summary of the Alternatives that have been considered but dismissed from further consideration is included in the EA in Section 2.3, on page 37. As stated in the EA on page 37, "In the event that a proposed operation cannot be sufficiently modified to prevent the impairment of park resources and values, the NPS may seek to extinguish the associated

Comment

The Sierra Club is aware of at least 19 wells that NPS has approved or is in the process of approving that involve slant drilling under the Jack Gore Baygall, Lower Neches River Corridor, and Big Sandy Units of BTNP. (#4) NPS has not developed an alternative analysis that seriously assesses and evaluates as an alternative the buying of mineral rights under the Big Sandy Unit that Comstock proposes to use for drilling. Such an alternative is a "reasonable" alternative as required to be assessed under the National Environmental Policy Act and the President's Council on Environmental Quality (CEQ) regulations that implement NEPA.

(#4) A further documented lack of analyses for all reasonable alternatives is that NPS in the past has refused to consider the option of drilling a well within a unit in EA's. While the Sierra Club does not favor this alternative it is a "reasonable alternative". NPS must analyze and include in the EIS "all reasonable alternatives" including buying the mineral rights and or drilling in the Big Sandy Unit.

This alternative is determined by NPS to not be reasonable on **page 37** of the EA where NPS states, "Although drilling two wells from inside the Unit is technically feasible, **this alternative was judged to be unreasonable in terms of economics, logistics**, degree of environmental impacts, and time required to implement the project."

However, for the Comstock proposal for the Collins #3 Well, in Section 7, page 1, of the March 2004 information submitted by Comstock to NPS the company states, "The preferred location for most wells is directly above the target **because a vertical hole is less expensive and has fewer risks associated with achieving the technical objectives of the project.**" (#4) NPS must analyze and include in this EA "all reasonable alternatives" including buying the mineral

Response

mineral right through acquisition, subject to the appropriation of funds from Congress." The proposal does not present a significant threat of damage to park resources. Therefore this alternative was considered and rejected.

Section 2.3 of the EA, on page 37 also considered but dismissed a Unit Alternative.

Comment

rights and or drilling in the Big Sandy Unit.

5) On pages 43-53, 3.0 Affected Environment and Environmental

Consequences, Comstock has proposed drilling three wells. Davis Brothers has drilled 4 wells and the NPS has approved or proposed the approval of 12 more wells for Davis. Many other wells have been drilled both in the BTNP and adjacent to it on private lands. Many pipelines, roads, logging operations, burning, and other actions have occurred in the past, present, and reasonably foreseeable future in BTNP and adjacent to BTNP but (#5) **NPS has refused to assess all the cumulative impacts of these actions.** This is illegal under NEPA.

On page 1, the current proposal for the Black Stone B1 well includes the bulldozing of vegetation on 3.67 acres; the use of a road; and the construction of a 4-6 inch diameter 800 foot pipeline and for the Black Stone D1 well includes the bulldozing of vegetation on 3.47 acres; the use of a 0.8 mile road; and the construction of a 4-6 inch diameter 8,200 foot pipeline.

At minimum, an adequate cumulative effects analysis must:

- 1) Identify the past, present, and reasonably foreseeable actions of FS and other parties affecting each particular aspect of the affected environment
- 2) Must provide quantitative information regarding past changes in habitat quality and quantity, water quality, resource values, and other aspects of the affected environment that are likely to be altered by FS actions
- 3) Must estimate incremental changes in these conditions that will result from FS actions in combination with actions of other parties, including synergistic effects

Response

Response #5: Each impact topic covered in the EA describes the potential for cumulative impacts from a variety of sources, including timber management and additional oil and gas development.

A quantitative cumulative impact analysis is not possible for this proposal because the NPS lacked specific information to conduct a quantitative analysis. However, cumulative impacts are assessed qualitatively in the EA. The NPS believes that the cumulative impacts are addressed adequately in the Comstock Black Stone B1 and D1 EA.

Comment

Response

4) Must identify any critical thresholds of environmental concern that may be exceeded by FS actions in combination with actions of other parties

5) Must identify specific mitigation measures that will be implemented to reduce or eliminate such effects

The NEPA and the CEQ require that analysis, assessment, and evaluation of cumulative impacts be conducted. Please see Chapter 1508.7 and 1508.8 of the CEQ regulations which are binding on all federal agencies to implement.

Please also see the CEQ's January 1997 document, "Considering Cumulative Effects Under the National Environmental Policy Act." It is clear that the NPS has an affirmative duty, a statutory duty, and a regulatory duty to carry out cumulative impacts assessment.

The NPS in the past has attempted to short-circuit this required duty by suggesting there are no significant effects. NPS should use the CEO's "Considering Cumulative Effects Under the National Environmental Policy Act" to conduct a cumulative impacts assessment.

Some of the especially important quotes from the CEQ document include:

a. On page v, "Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized. Considering cumulative effects is also essential to developing appropriate mitigation and monitoring its effectiveness."

b. On page v, "By evaluating resource impact zones and the life cycle of effects rather than projects, the analyst can properly bound the cumulative effects analysis. Scoping can also

This Page Intentionally Left Blank

Comment

facilitate the interagency cooperation needed to identify agency plans and other actions whose effects might overlap those of the proposed action.”

c. On page vi, “When the analyst describes the affected environment, he or she is setting the environmental baseline and thresholds of environmental change that are important for analyzing cumulative effects. Recently developed indicators of ecological integrity (e.g., index of biotic integrity for fish) and landscape conditions (e.g., fragmentation of habitat patches) can be used as benchmarks of accumulated change over time ... GIS technologies provide improved means to analyze historical change in indicators of the condition of resource, ecosystems, and human communities, as well as the relevant stress factors.

d. On page vi., “Most often, the historical context surrounding the resource is critical to developing these baselines and thresholds and to supporting both imminent and future decision-making.”

e. On page vi "... the consequences of human activities will vary from those that were predicted and mitigated... therefore, monitoring the accuracy of predictions and the success of mitigation measures is critical.

f. On page vi, "Special methods are also available to address the unique aspects of cumulative effects, including carrying capacity analysis, ecosystem analysis, economic impacts analysis, and social impact analysis.

g. On page vii, Table E-1, "CEA Principles ... Cumulative effects analysis ...Address additive, countervailing, and synergistic effects ... Look beyond the life of the action.

h. On page 1, "The range of actions that must be considered includes not only the projects

Response

This Page Intentionally Left Blank

Comment

proposal but all connected and similar actions that could contribute to cumulative effects.

i. On page 3, "The purpose of cumulative effects analysis, therefore is to ensure that federal decisions consider the full range of consequences of actions... If cumulative effects become apparent as agency programs are being planned or as larger strategies and policies are developed then potential cumulative effects should be analyzed at that times.

j. On page 3, Cumulative effects analysis necessarily involves assumptions and uncertainties, but useful information can be put on the decision-making table now ... Important research and monitoring programs can be identified that will improve analyses in the future, but their absence should not be used as a reason for not analyzing cumulative effects to the extent possible now... adaptive management provisions for flexible project implementation can be incorporated into the selected alternative."

k. On page 4, "The Federal Highway Administration and state transportation agencies frequently make decisions on highway projects that may not have significant direct environmental effects, but that may induce indirect and cumulative effects by permitting other development activities that have significant effects on air and water resources at a regional or national scale. The highway and other development activities can reasonably be foreseen as "connected actions.

l. On page 7, "Increasingly, decision makers are recognizing the importance of looking at their projects in the context of other development in the community or region (i.e., of analyzing the cumulative effects) ...Without a definitive threshold, the NEPA practitioner should compare the cumulative effects of multiple actions with appropriate national,

Response

This Page Intentionally Left Blank

Comment

regional, state, or community goals to determine whether the total effect is significant... Cumulative effects results from spatial (geographic) and temporal (time) crowding of environmental perturbations. The effects of human activities will accumulate when a second perturbation occurs at a site before the ecosystem can fully rebound from the effect of the first perturbation. "

m. On page 8, Table 1-2, lists 8 principles of cumulative effects analysis. **A summary of summary of these principles includes:**

- 1) Cumulative effects are caused by the aggregate of past, present, and reasonably foreseeable future actions.
- 2) Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken no matter who has taken the actions.
- 3) Cumulative effects needs to be analyzed in terms of than specific resource, ecosystem, and human community being affected.
- 4) It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.
- 5) Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries.
- 6) Cumulative effects may result form the accumulation of similar effects or the synergistic interaction of different effects.
- 7) Cumulative effects may last for many years beyond the life of the action that caused the effects.
- 8) Each affected resource, ecosystem, and human community must be analyzed in term of its capacity to accommodate additional effects, based on its own time and space parameters.

n. On page 19, "The first step in identifying

Response

This Page Intentionally Left Blank

Comment

future actions is to investigate the plans of the proponent agency and other agencies in the area. Commonly, analysts only include those plans for actions which are funded or for which other NEPA analysis is being prepared. This approach does not meet the letter or intent of CEQ's regulations... The analyst should develop guidelines as to what constitutes "reasonably foreseeable future actions" based on planning process within each agency... In many cases, local government planning agencies can provide useful information on the likely future development of the region, such as master plans. Local zoning requirements, water supply plans, economic development plans, and various permitting records will help in identifying reasonably foreseeable private actions... These plans can be considered in the analysis, but it is important to indicate in the NEPA analysis whether these plans were presented by the private party responsible for originating the action. Whenever speculative projections of future development are used, the analyst should provide an explicit description of the assumptions involved ... NEPA litigation .., has made it clear that "reasonable forecasting" is implicit in NEPA and that it is the responsibility of federal agencies to predict the environmental effects of proposed actions before they are fully known.

o. On page 23, "Characterizing the affected environment in a NEPA analysis that addresses cumulative effects requires special attention to defining baseline conditions. These baseline conditions provide the context for evaluating environmental consequences and should include historical cumulative effects to the extent feasible.

p. On page 29, "Lastly, trends analysis of change in the extent and magnitude of stresses in critical for projecting the future cumulative

Response

This Page Intentionally Left Blank

Comment

effects.

q. On page 29, "Government regulations and administrative standards... often influence developmental activity and the resultant cumulative stress on resources, ecosystems, and human communities.

r. On page 31, "Cumulative effects occur through the accumulation of effects over varying periods of time. For this reason, an understanding of the historical context of effects is critical to assessing the direct, indirect, and cumulative effects of proposed actions. Trends data can be used... to establish the baseline for the affected environment more accurately (i.e., by incorporating variation over time) ... to evaluate the significance of effects relative to historical degradation (i.e., by helping to estimate how close the resource is to a threshold of degradation) ... to predict the effects of the actions (Le., by using the model of cause and effects established by past actions)."

s. On pages 38-40, "Using information gathered to describe the affected environment, the factors that affect resources (i.e., the causes in the cause-and-effect relationships) can be identified and a conceptual model of cause and effect developed... The cause-and-effect model can aid in the identification of past, present, and future actions that should be considered in the analysis... The cause-and-effect relationships for each resource are used to determine the magnitude of the cumulative effect resulting from all actions included in the analysis... one of the most useful approaches for determining the likely response of the resource... to environmental change is to evaluate the historical effects of activities similar to those under consideration.

t. On page 41, "The analyst's primary goal is to determine the magnitude and significance of the environmental consequences of the

Response

This Page Intentionally Left Blank

Comment

proposed action in the context of the cumulative effects of other past, present, and future actions... The critical element in this conceptual model is defining an appropriate baseline or threshold condition of the resource.

u. On page 43, "Situations can arise where an incremental effect that exceeds the threshold of concern for cumulative effects results, not from the proposed action, but the reasonably foreseeable but still uncertain future actions.

v. On page 45, "The significance of effects should be determined based on context and intensity... Intensity refers to the severity of effect... As discussed above, the magnitude of an effect reflects relative size or amount of an effect. Geographic extent considers how widespread the effect might be. Duration and frequency refers to whether the effect is a one-time event, intermittent, or chronic.

w. On page 45, "Determinations of significance... are the focus of analysis because they lead to additional (more costly) analysis or to inclusion of additional mitigation (or a detailed justification for not implementing mitigation) ... the project proponent should avoid, minimize, or mitigate adverse effects by modifying alternatives... in most cases, however, avoidance or minimization are more effective than remediating unwanted effects."

y. On page 51, "different resource effects that cumulatively affect interconnected systems must be addressed in combination."

The NPS must utilize the CEQ document to the maximum extent possible so that a full and legal cumulative impacts assessment is conducted. But there is no specific quantitative cumulative impact assessment for any past, present, and reasonably future foreseeable action in the EA. NPS is deficient in its cumulative impacts assessment. Where are the

Response

This Page Intentionally Left Blank

Comment

impact from the development of entire well fields for both the east and west sides? Where are the impacts from other oil/gas activities? Where are the impacts from past logging? Where are the impacts from past grazing?

6) **Page i, Summary, (#6)** NPS cannot use mitigation measures to make the proposed action such that there are no significant environmental impacts and escape alternatives analyses for environmental impacts and an EIS. NPS must assess the impacts of the proposed action with and without mitigation.

7) **On pages 6-8, 1.2.3 NPS Nonfederal Oil and Gas regulations, 36 CFR 9B**, the Sierra Club disagrees with the NPS that it is not granting an approval or issuing a permit. As a result we disagree with **(#7) the three so-called "legally permissible options"** that have been used here and in other EA's. NPS is authorizing oil/gas drilling via a waiver which is a form of approval. Therefore NEPA does apply and a full EIS should be prepared with mandatory mitigation and not voluntary mitigation measures.

8) **Pages 8-9, 1.2.6 NEPA**, NPS states it is not granting an "approval" and therefore it does not have to conduct the EA but is anyway. This is an untrue statement. **(#8) The granting of a waiver to allowing drilling through the BTNP is an approval because it ensures that Comstock does not have to develop and plan of operations and requires NPS agreement and approval. The drilling by Comstock does trigger the significance test in NEPA so this is a "major federal actions significantly affecting the quality of the human environment."** Therefore an EIS should be prepared. If NPS argues that the drilling is not significant then the Sierra Club's response is that the drilling of multiple wells next to the BTNP and through the BTNP via slant drilling in addition to the proposals to drill wells within the BTNP in the Turkey Creek and Big Sandy Units does

Response

Response #6: CEQ's 40 Most Asked Questions Memorandum addresses the use of mitigation in an EA (see question #40). It states that, "Mitigation measures may be relied upon to make a finding of no significant impact only if they are imposed by statute or regulation or submitted by an applicant or agency as part of the original proposal." Question 40 goes on to say, "In some instances where the proposal itself so integrates mitigation from the beginning that it is impossible to define the proposal without including the mitigation, the agency may then rely on the mitigation measures in determining that the overall effects would not be significant..." In this case the mitigation was proposed by the operator, is integral to the proposal (e.g., the surface location outside of the park, the use of a containerized mud system, etc.). The NPS analyses indicate that impacts would be below the significance threshold. Further, the operator is required to comply with all state and federal requirements to drill, produce and transport hydrocarbons which will result in protecting the human environment from adverse impacts.

Response #7: see responses #3 and #6 above

Response #8: see response #3 above

Comment

constitute the crossing of the significance threshold and requires that a programmatic EIS be prepared for the entire BTNP. There is no oil/gas management plan which assesses the total cumulative impacts of multiple wells drilled inside and just outside the BTNP. The Sierra Club requests NPS prepare such an EIS.

9) **Page 9, 1.2.6 NEPA, (#9)** additional impacts that would be considered under connected and cumulative actions are emissions due to spills from pipeline use.

10) **Pages 10-13, 1.3 Issues and Impact Topics Evaluated and 1.4 Issues and Impact Topics Eliminated from Further Analysis, (#10)** the Sierra Club disagrees with NPS that visitor use and experience in the unit; water resources, floodplains, and wetlands in and outside of the unit; threatened and endangered species and other species of management concern in the unit; cultural resources in the unit; air quality in the unit, geology and soils in the unit; fish & wildlife in and outside of the unit; socioeconomics in and outside of the unit; environmental justice; vegetation in the unit; lightscape management in and outside the unit; leaks and spills, groundwater contamination; and scenic beauty impacts should not be assessed.

(#11) The impacts and actions within the BTNP cannot be separated from that outside the BTNP. The NPS artificially separates the impacts into inside the BTNP and outside the BTNP and connected and cumulative impacts when in fact all are due to what is happening due to oil/gas activities that affect BTNP and should be assessed in an EIS. The NPS is wrong when it states that "The Sierra Club's public scoping comment letter identifies no additional resources and concerns, or alternatives not already being considered." In fact the Sierra Club mentioned several concerns that the NPS either has not addressed in this EA or has incompletely addressed.

Response

Response #9: Please see page 9 of the EA, under the heading *Connected Actions*, the NPS lists hydrocarbon transportation.

Response #10: These topics were assessed to a limited extent, but were dismissed from further evaluation in Section 3 of the EA for the reasons described in Section 1.4.

Response #11: The NPS has intentionally presented the potential impacts inside the Preserve associated with the downhole activities separately from the impacts from the connected actions outside of the Preserve in the EA. The downhole activities are analyzed to determine whether there is a significant threat to park resources and if a §9.32(e) exemption should be granted, whereas the analysis of the impacts from the connected actions are presented in addition to the downhole operations to disclose to the public all of the potential impacts on the human environment as required under the NEPA. Cumulative impacts are presented for the analysis area which

Comment

These concerns include:

A. (#12) NPS must assess the impacts that additional traffic will have on the BTNP and its visitors and or private property via air pollution, noise, and destruction of the road surface by heavy vehicles.

B. (#13) NPS must assess the indirect, cumulative, and connected impact that the produced water will have at the place where it will be discharged for cleaning.

C. (#14) NPS must assess how lights affect bats, insects, and other wildlife attracted to lights.

D. (#15) NPS must assess how displaced wildlife does not come back to degraded or destroyed habitat right away or at all. This would be a long-term impact of probably 20 years or more even if the well is dry. When habitat is lost, unless other habitat nearby is not at carrying capacity, wildlife displaced will die unless they kill or displace existing wildlife in suitable habitat.

E. (#16) NPS must address in an EIS how legally binding the mitigation measures are if violations are found. For example, for the Davis Brothers wells the company stated that mitigation measures were voluntary only and could not be enforced. If this is the case then NPS must acknowledge that mitigation measures that reduce impacts are not legally enforceable.

F. (#17) NPS must address in the EIS that the enforcement authority it has and how willing it is to use that authority. NPS must tell the whole story and the whole truth. The basic problem is trust. The EIS must address what illegal actions are expected and excused by NPS or will be prosecuted.

G. (#18) NPS must reveal all impacts from the

Response

includes areas inside and outside of the Preserve.

Response #12: Access to the Black Stone B1 and D1 wellsites is outside of the Preserve via existing logging roads. There should be no access to the Preserve from these roads and no measurable impacts on Preserve resources from their use. Impacts on Adjacent Landowners, Resources and Uses in addressed on pages 48 through 53 of the EA.

Response #13: The operator will have separation facilities onsite to separate hydrocarbons and produced water. The produced water would be transported by truck to an approved disposal facility. The only impact associated with the disposal of produced water is the use of trucks along the spur, access and public roads. Also see response #11.

Response #14: See Errata Section text addition to pages 22 and 23 of the EA.

Response #15: See the first sentence under the heading Impacts outside the Unit on page 22 of the EA.

Response #16: See Response #3 above. Also see Section 1.2.3 of EA.

Response #17: NPS monitoring and enforcement authority is covered in Sections 1.2.4 and 1.2.5, on page 8 of the EA.

Response #18: See Sections 1.4 and 3.2 of the

Comment

well, pipeline, and any other associated action on riparian areas, floodplains, slope forest communities, and upland forest communities.

H. (#19) NPS must reveal the impact on all roads and bridges that are used to access the well site, the pipeline, and any associated activities.

11) Pages 12-13, 1.4 Issues and Impact Topics Eliminated from Further

Analysis, NPS says, "Minor impacts are generally those that would result in a change to the resource or value, but the change would be small and of little consequence and would be expected to be short-term and localized."

(#20) NPS does not define what "small", "little", "short-term", and "localized" means.

Without this information the public cannot review and comment on NPS's assertions credibly.

NPS must define these terms in the context of "minor impacts".

12) Page 13, Socioeconomics in and outside of the Unit, the NPS reasonably foreseeable development scenario is already out-of-date.

Already there have been approved or soon to be approved, in the past three years, 19 slant wells. (#21) The NPS needs an updated scenario that uses the most recent drilling information in and next to BTNP.

Additional wells inside the BTNP, by Sanchez and Comstock are being proposed for Big Sandy and Turkey Creek Units.

13) Pages 14-15, Environmental Justice,

(#22) NPS states that "The proposed action would not have health or environmental effects on minorities or low-income populations or communities" but provides no data to document this assertion. NPS must document in the EA factual information it uses to determine that impacts will not occur.

14) Page 15, Prime and Unique Farmlands

Response

EA.

Response #19: See Sections 2.2.2 and 3.2 of the EA.

Response #20: Please see page 43, 3rd paragraph, in the EA. The duration of impacts could be short-term, ranging from days to three years in duration, or long-term extending up to 20 yrs or longer. Generally, short-term impacts would apply to construction activities and long term impacts would apply to roads, production operations, and gathering lines. "Localized" describes the extent of impacts within the project area.

Response #21: The RFD scenario is based solely on available production data and it is possible that more or less wells could be drilled. Although 19 directional wells have been proposed to be drilled into the Preserve, they may not all be drilled, so the RFD scenario is still valid.

Response #22: The EA did not analyze Environmental Justice for the reasons identified in Section 1.4, pages 12 and 13.

Comment

in the Unit, (#23) NPS states that "There are no prime or unique farmlands located within the Unit". NPS does not provide the public with the factual information that documents that this is true. This information is needed in the EA to document that impacts will not occur.

15) Pages 15-16, Air Quality, (#24) air pollutants due to fires, explosions, releases, and spills are not mentioned in the EA. All of these potential air pollutants from these actions must be assessed in the EA.

16) Pages 16-17, Lightscape Management in and outside of the Unit, (#25) NPS states that visitors are not expected to be adversely affected. NPS says nothing about wildlife. NPS also states that there "would be localized, short to long-term, negligible to minor, adverse impacts" but then does not say what these are and does not define the terms it uses in stating what the impacts are. NPS also states that lights could "result in localized, short to long-term, beneficial and adverse impacts on lightscapes" but then does not explain what it means by this statement.

NPS states there will be low intensity impacts but never explains what that means. NPS needs to explain clearly what the impacts are and how it derives these for lightscape.

17) Pages 17-18, Geology and Soils in the Unit, (#26) NPS never stated how it determines that migration of contaminants will be "low potential". NPS must reveal what assumptions and factual information it is using to make such assertions and judgments. NPS does not mention oil spills or chemical spills and leaching and percolation of these contaminants into the groundwater and soil.

18) Pages 18-20, Water Resources, Floodplains, and Wetlands in and outside of the Unit, (#27) NPS ignores the impacts of

Response

Response #23: Information for this analysis was obtained from page 53 of the Soil Survey of Polk and San Jacinto Counties, Texas. That page reads: "Urban or built - up land, public land, and water areas cannot be considered prime farmland ... Public land is land not available for farming in national forests, national parks, military reservations, and state parks." Therefore according to the definition of prime farmland there are no such soils inside the boundary of the Preserve. NPS analysis of the Soil Survey of Polk and San Jacinto Counties, Texas and consultation by the NPS with the Natural Resource Conservation Service Center in Livingston resulted in the verification of this statement.

Response #24: Air quality, including particulate matter as it relates to the project area can be found on pages 15-16, 49, and 51 of the EA.

Response #25: See response #14.

Response #26: The analysis in the EA concludes that the proposed surface casing and cementing program, site location, site design, and practices Comstock would implement during the drilling and production phase would most likely keep direct impacts localized to the site itself. Additionally, the surface casing and cementing program proposed by Comstock meets or exceeds State of Texas and federal standards for isolating and protecting usable quality water zones. Once the well's surface casing is set and properly cemented, long-term

Comment

oil/gas drilling and production has on shallow water aquifers, recharge areas, seeps in the area and groundwater flow into streams. Contaminant percolation should be discussed. The well pad should have a plastic lining to reduce the potential for groundwater impacts due to contaminant percolation. The Sierra Club has hiked near the drill site for the D-1 well and found many sloughs, abandoned stream channels, and wetlands in the floodplain of Big Sandy Creek. (#27) NPS says that the potential for release of oil or other hazardous substances is "unlikely" but does not explain how it arrived at this determination.

19) **Pages 20-21, Vegetation in the Unit,** (#28) NPS says it considered types and volumes of contaminants that would be present for Black Stone B1 and D1 wells but then fails to provide this information and the analysis using this information. The public is not allowed to review and comment on this information, the assumptions used, and the analyses made which led NPS to this conclusion that the intensity will be negligible to minor and the migration will be low in potential.

20) **Pages 21-23, Fish & Wildlife in and outside of the Unit,** NPS states that the well pad for Black Stone D1 "is situated in an area that is rich in plant diversity described as mixed pine-hardwood forest on uplands and mixed hardwood forest on bottomlands." NPS also stated earlier that D1 is within 100 feet of an unnamed drainage feature and 300 feet from an unnamed flowing creek that leads into Big Sandy Creek. (#29) NPS should investigate, assess, analyze, and evaluate the impacts to wildlife by the destruction or fragmentation of these areas in the EA. NPS does not should explain how wildlife acclimate to noise and when this would happen.

Response

protection of usable quality water zones is highly likely. Also see response #28.

Response #27: Because of the well locations, State of Texas RRC drilling and production requirements and mitigation measures to be implemented by Comstock, the sites have low potential to affect Preserve water resources. In addition, please refer to response #28.

Response #28: See Errata Section text addition to page 20 of the EA.

Response #29: See response #15.

Comment

21) **Pages 23-24, Threatened and Endangered Species, and Other Species of Management Concern in and outside of the Unit, (#30)** NPS does not assess the impacts of the proposal on all state listed species.

Several of these species could exist on the site or in BTNP next to the site including the Timber/Canebrake Rattlesnake, Southeastern Myotis Bat, and Rafinesque's Big-eared Bat, and Alligator Snapping Turtle.

22) **Pages 20-21, Visitor Use and Experience in the Unit, (#31)** NPS dismisses the fact that visitors could hear the noise from the oil/gas activities and could see them if hiking near the boundary. The Sierra Club hikes in the area and does not appreciate NPS dismissing the degradation of its enjoyment by saying "there are no impacts anticipated on visitor use and experience in the Unit from connected actions ... this topic is being dismissed from further analysis in this EA." NPS is showing its bias against cross country hiking and in favor of noise impacts and scenic beauty degradation.

23) **Page 32, 2.2.3 Wellpads, (#32)** the NPS should require that any water needed for oil/gas activities must be brought to the well pad. Drilling of water wells could lower shallow water aquifers or lead to their contamination. This could also lead to reduced stream flow in the area.

24) **Page 35-37, 2.2.6 Reclamation Plan,** NPS must describe how the well pads will be reclaimed. **(#33)** There is no description of reclamation in the EA. The topsoil must be saved and used when the well pads are reclaimed. **(#33)** NPS should report what the surface use agreement states about reclamation.

(#34) NPS admits that mitigation measures that Comstock has stated that it will adhere to are not enforceable. If they are not enforceable then NPS cannot use them to state that

Response

Response #30: Due to lack of suitable habitat for several of the species and an absence of observations of any federally or state listed species by Preserve staff in 2003 and by Blanton and Associates in May and June of 2004, this impact topic was dismissed from further analysis. The rationale for dismissing this impact topic in the EA is presented in Section 1.4. The text included in the EA on pages 23 - 24 deals only with Threatened and Endangered Species, and Other Species of Management Concern in the Unit.

Response #31: See page 25 of the EA as well as the Errata Section text additions to page 25 of the EA.

Response #32: The NPS does not have jurisdiction over the use of water outside of the park.

Response# 33: The NPS does not have jurisdiction over the surface reclamation outside of the park. This is between the surface owners, Dennis Prejean and Molpus Timberlands Management, and the operator, Comstock Resources, Inc. The specific reclamation procedures were not provided to the NPS beyond what is described in Section 2.2.6, Reclamation Plan, on page 35 of the EA.

Response #34: See response #6 as well as

Comment

mitigation will reduce or eliminate impacts to the point of non-significance for issue impact analysis. The Sierra Club believes that since NPS is approving waivers to prepare plans of operation that in fact the mitigation measures, if Comstock agrees to them in writing, are enforceable as part of the approval process.

(#35) In Table 2 the ring levee should be three feet high and not one foot. A one foot high level is much too easy to breach and will not contain enough spilled liquid to ensure that outside the well pad contamination does not occur especially during periods of flooding.

(#36) Another mitigation measure the NPS should require is the lining of well pads and any other dug facility to reduce the possibility of contamination of soil and groundwater.

25) Page 43, 3.0 Affected Environment and Environmental Consequences, Methodology, the Sierra Club disagrees that 3 years is a short-term duration for environmental impacts. We believe that 1 year better fits the description of short-term for duration of an environmental impact. **(#37)** NPS provides no documentation to buttress its decision that 3 years is a short-term duration in the EA. The public has a right to know how that decision was made and to comment on that decision after reviewing the documentation that NPS made the decision.

26) Page 44, 3.1 Impacts on Natural Soundscape in the Unit, Methodology, **(#38)** NPS fails to define what "barely"; "slight"; "readily"; and "severely" mean in the context of its impact methodology. The public has a right to review the documentation that NPS used to make these decisions and to comment on its adequacy. NPS should explain thoroughly in this EA how it derived these thresholds of change for the intensity of an impact and what they mean.

Response

response #17.

Response #35: The ring levee height of one foot does not include the ditch cut around the well pad on the inside of the levee which brings the height of the levee to two feet above the bottom of the ditch.

Response #36: See page 36 of the EA for a description of the lining of the washout / emergency pit.

Response #37: The NPS is defining the terms to be used in describing direct, indirect, and cumulative impacts under the two alternatives in this section, not making a decision.

Response #38: The NPS uses these terms in the qualitative analysis of impacts on natural soundscape in the Unit. See response #37.

Comment

27) **Page 48, Impacts on Natural Soundscape in the Unit under Alternative B, Proposed Action, Conclusion, (#39)** NPS fails to provide the public with the documentation that it uses (criteria or standards) to determine if an impairment of a resource has occurred. The public has a right to review how NPS makes such a determination and comment on its adequacy.

28) **Page 51, Impacts on Adjacent Landowners, Resources and Uses under Alternative B, Proposed Action, Air Quality, (#40)** NPS fails to discuss road dust, hydrogen sulfide, and emissions from fires, explosions, releases, and spills under air quality. NPS is not disclosing all potential impacts due to the proposal.

Response

Response #39: See Section 1.2.1, on page 5 of the EA for a discussion of the criteria NPS uses to determine if an impairment of a park resource or value has occurred.

Response #40: See response #24.